Theoretical Consideration on Assessment for Psychiatric Occupational Therapy: Factors of Social Adaptation and Assessment of Them

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Theoretical Considerations on Assessment for Psychiatric Occupational Therapy: Factors of Social Adaptation and Assessment of Them

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A contemporary concept of rehabilitation (the social model) postulates a patient's life activities and participation in society interacts with their health condition, body functions and structures, and environmental and personal factors. Among other factors, the assessment by OTRs (Occupational Therapists) of patients' adaptability should focus on the elementary adaptive functions that are necessary for adaptation with the standard social environment. OTRs can predict patients' adaptability by integrating the multiple observational assessments of patients' functions in different OT activities. Based on the two-phase theory of OT assessment, we have developed a new scale to assess these functions (Assessment System for Psychiatric OT: ASPOT). It consists of two scales: the O Scale is for observational assessment of patients' adaptive functions in OT settings and the S scale for predictive assessment of patients' adaptability in real social life. Both include a series of sub-scales to assess three domains of function, that is, ADL, interpersonal skills, and individual factors.

Key word: Occupational therapy, social adaptation, assessment, ASPOT

Prediction of Adaptation and Role of Psychiatric Occupational Therapy

Conceptual Transitions of Social Adaptation in Psychiatric Rehabilitation

Psychiatric occupational therapy (Psychiatric OT) is a set of treatment techniques to attempt to improve social adaptive functions, abilities, or skills of psychiatric patients by giving them an opportunity to participate in a variety of kinds of activities such as sports, handicraft, or group discussion. Psychologists define social adaptation as the harmonious relationship between individual and environment, in which an individual satisfies his/her personal needs, effectively meeting demands from the environment. In other words, social adaptation means to independently keep a healthy social life utilizing social resources. It needs a certain level of integration of motor, sensory, cognitive, emotional, motivational, and interpersonal functions. Psychiatric OT aims to improve patients' adaptive functions by having them perform specially designed activities.

The assessment of patients' adaptive functions is necessary for the effective OT, because occupational therapists (OTRs) must choose activities and provide appropriate instructions and

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guidance, matched with the level of each patient's functions. Not only for designing the effective OT, the OT assessment is also useful for the prediction of social adaptation of patients. When a psychiatric patient leaves a hospital, the medical staff arranges his/her social environment and assists his/her adaptation. For this intervention, the assessment of the level and breadth of the patient's adaptive functions is necessary. Therefore, the prediction of social adaptation of patients is an important output that is expected for the OTR to assess their adaptive functions by observing their behaviors in the OT setting.

With a recent development of rehabilitation sciences, the concept of social adaptation of the handicapped has evolved. It is a paradigm shift from the medical model to the social model of rehabilitation (NIDRR, 1999). A traditional medical model view is that handicap is a restriction of everyday activities caused by disease and that society is constructed according to the standard of the non-handicapped. Since both the non-handicapped and the handicapped are uniformly required to adapt to the society, it is natural that the handicapped often has difficulties with effective adaptation to it. And, it has been the rehabilitation that medical professionals assist adaptation of the handicapped by reforming its conditions. In contrast with the medical model, the social model emphasizes that society should arrange the environment to which the handicapped can adapt. It is to eliminate the physical and social obstacles against the handicapped from his/her environment, not to impose him/her the standard for the non-handicapped. Further, the intervention by medical professionals is regarded as not only the attempt to change personal conditions of the handicapped but also to improve the environmental conditions.

Reflecting such a paradigm shift, the World Health Organization (WHO) recently revised the international classification of functioning and disability (ICF). It is shown in Figure 1, with modifications on "Environmental and Personal factors." "Activities" at the center of this figure represents behavior repertoires that a patient can be engaged in his/her social life and "Participation" represents the level of social adaptation of the patient. Different from the medical model assuming a one-directional causation that functional disorder restricts activities, which in turn interferes with social adaptation, ICF postulates that both activities and participation interacts with all the other factors including health conditions, body functions and structures, and environmental and personal factors. The scheme postulates that the influence of disorders and the level of social adaptation can be understood or evaluated only by considering the environmental and personal factors.

Factors of Social Adaptation, Elementary Adaptive Functions, and Standard Environment

Assuming that both environmental and personal factors are divided into two categories, we partially modified ICF to draw Figure 1. In this framework of rehabilitation represented by Figure 1, what roles can OTRs play in the intervention of social adaptation of psychiatric patients?

Modes of social adaptation are not uniform among healthy people, and there are, indeed, a variety of styles of social adaptation. The diversity is produced by idiosyncratic factors such as personal values, personality, preferred life style, etc. One chooses quiet and calm life, enjoying solitude, while the other is sociable and wishes noisy everyday life interacting with many people.

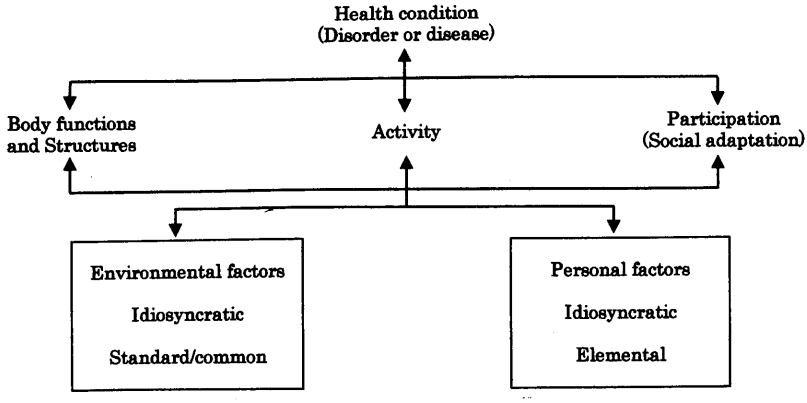

Figure 1 The International Classification of Functioning and Disability (ICF) and factors of social adaptation.

Both of these styles are adaptive unless the individuals are unhappy, violating social rules, or unduly depending on others. On the other hand, there may be general and common environmental requirements in a society, with which everyone must comply to live within it. By satisfying these minimum requirements, idiosyncratic adaptive patterns, such as "sociable" or "solitary," may be permissible.

The discussion suggests that personal factors should be divided into two clusters. One is the elementary adaptive function that is necessary for everyone to live adaptive life in a society. They include elementary abilities or skills to cope with the minimum environmental requirements, such as an ability to keep one's health or a skill to have minimum social contacts. The other cluster of personal factors consists of idiosyncratic orientations, such as personal values, personality, needs, or preference in life style, which shape idiosyncratic adaptive patterns. Mere coping with the minimum environmental requirements is not enough for enjoying social life. Only after shaping idiosyncratic adaptive patterns that fit personal interest or preference, an individual can enjoy social life. Therefore, the idiosyncratic factor may be strongly related to individual's satisfaction with social life.

We assume that these two clusters of personal factors are hierarchical, that is, the idiosyncratic adaptive pattern is based on the elemental adaptive functions. In other words, personal factors of social adaptation consist of the elemental adaptive functions, which are necessary for everyone, and idiosyncratic orientations, which produce idiosyncratic adaptive patterns.

Another set of determinants of social adaptation is the environmental factor. When the environment is severe, it may be hard for anyone to adapt to it. If it is benign and friendly, it may be easy to cope with. Obviously, the environmental factor influences the level of individual's social adaptation, and it is crucial particularly for psychiatric patients because they generally do not have flexible and robust adaptive functions. When the social environment such as family or community is supportive, it may be possible to adapt to it even if the patient's adaptive functions are relatively low. It suggests that which level of adaptive functions of patients is necessary

depends on the severity or supportiveness of environment. If requisite adaptive functions differ depending on the environmental conditions, does the concept of elementary adaptive functions make sense?

For a reason below, we assume that it is necessary and useful. Just as individual adaptive style is idiosyncratic, the environment is also idiosyncratic for each patient: One environment may be supportive but the other environment may be disturbing. Even though each environment seems so unique, however, we assume that there are a certain common conditions involved in every environment. We can have a rough understanding or image of how a healthy individual adaptively lives and functions in a society. That we can have an image of "the standard adaptive mode of life" implies that we can have an image of "standard environment." When a psychiatric patient leaves hospital, medical professionals may be able to predict in some degree whether the patient can get along or not with his/her environment, even though they do not know well about his/her family and community. They can do it by imaging a standard environment and by putting the patient within the imaged environment.

The 'standard' environment is just an abstract, but does not exist anywhere. Nevertheless, both professionals and lay people can imagine it. People seem to have a cognitive scheme of the standard environment, even though it is not detailed. Using the scheme, they can understand what the adaptive life is and evaluate the quality of their own and others' social life. There is no guarantee that people have the same scheme, but we assume that it may be considerably consistent among the medical professionals because they often discuss with each other about patients' adaptability in psychiatric conferences and, thereby, they communicate their schema of standard environment with each other. The discussion and communication in the conferences may provide the professionals with opportunities to check their own schema and to elaborate them into socially more consistent ones.

The elementary adaptive function shown in Figure 1 is regarded as corresponding with the standard social environment, that is, it is the abilities and skills, which are supposed to be necessary to cope with the standard social environment. Medical professionals may assess a patient's elementary adaptive functions by placing him/her in the standard environment, eliminating idiosyncratic environmental conditions.

Psychiatric OT Assessment in Prediction of Adaptation

Prediction of adaptability of a psychiatric patient must be based on the assessment of all the factors included in Figure 1. How is this done in psychiatric hospitals (facilities or institutions)? In modern psychiatric rehabilitation, as shown in Figure 2, this is accomplished in team work by different medical professionals (modified from Nakamura, 2001). They usually or traditionally include medical doctor, nurse, physical therapist (PT), clinical psychologist, speech therapist (ST), social worker, and OTR. To predict a patient's adaptability in community, each presents his/her judgment based on special information at a conference. On a certain factor of adaptation, some professional's judgment is especially given more priority than others. On health conditions, for example, the judgment of medical doctors or nurses may be influential; Regarding physical functions and structures, PTs or STs can usually provide important information; Social workers

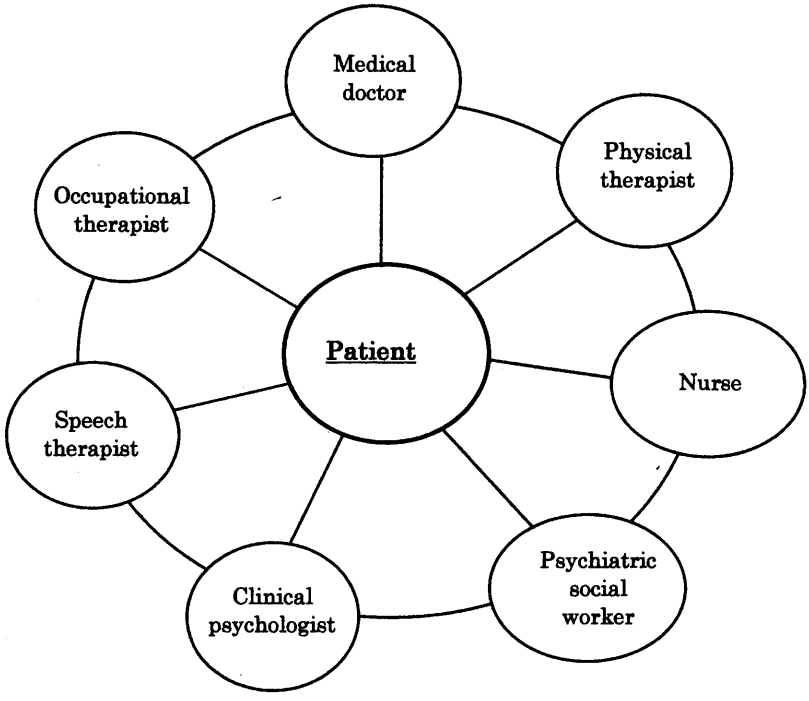

Figure 2 Team care by professionals in medical rehabilitation (modified from Nakamura (2001)).

are expected to be familiar with patients' family and community environment; The analysis of clinical psychologists may be usually suggestive about personal/idiosyncratic factors. Well, what is the issue that OTRs know more than the other professionals? It is the personal/elemental factor, that is, the elemental adaptive functions of patients.

OTRs have many opportunities to observe patients' behaviors in OT. The OT setting is not a real social situation, but the behaviors in which patients are engaged there reflect the skills and abilities necessary for social life. By systematically observing their behaviors, OTRs may make a good assessment of patients' elementary adaptive functions. In this assessment, OTRs may use the scheme of standard environment. OT provides patients with an opportunity to participate in group discussions or to make handcrafts. By assuming an observed behavior as occurring in the standard environment, OTRs can evaluate its appropriateness or effectiveness in terms of social adaptability. We believe, therefore, that OTR's important contribution to the psychiatric conference is to provide information and assessment of patients' elementary adaptive functions based on the observation in OT settings. By specially arranging the OT setting, it might be possible for OTRs to assess the other factors than elementary adaptation. Further, OTRs can gather the information by interviewing with patients' family or other medical staffs. However, it is the elementary adaptive functions that OTRs can reliably assess through routine OT activities in psychiatric hospitals. And, regarding the other factors, the other medical professionals often have more reliable information than OTRs. We argue, instead, that OTRs should hold the observational

data obtained from OT because the data may not be available to other professionals, and improve the skills of observation and evaluation of adaptive behaviors in OT settings.

As shown in Figure 1, the elementary adaptive function is just a factor among others that actually determine patients' social adaptation. Especially, it can only give a clue to patients' adaptability in the standard environment. However, the actual environment, in which a patient is anticipated to live, may be often more supportive or more restrictive than the standard one. The medical team can estimate a patient's adaptability in the actual environment by taking both the level of its severity and the elementary adaptive function into consideration. For example, consider a case that an OTR assesses the level of adaptive function of a patient as low. This assessment is made based on the assumption of standard environment. If the actual environment is anticipated to be more supportive than the average, the conference can judge the patient's actual adaptability as higher than the assessment by the OTR.

Further, Figure 1 suggests that patients' idiosyncratic personal factors also must be considered in the judgment of social adaptability. Adaptive life is that which gives patients personal satisfaction and the feeling of personall wellness. In order to assist a patient to achieve it, the medial professionals must know which life style a patient prefers and what he/she wishes to enjoy in his/her social life. In this regard, useful information may be provided by clinical psychologists.

Based on the above discussion, we regard the assessment for psychiatric rehabilitation and the roles of OTR in it as the followings: (1) Psychiatric rehabilitation includes the prediction of patients' social adaptability; (2) The prediction is made considering multiple factors shown in Figure 1; (3) Each medical professional has an advantage to the others in the assessment of a certain factor because of having unique skills regarding the factor; and (4) OTRs can contribute to the prediction of patients' social adaptability by presenting the assessment of their elementary adaptive functions based on the observation of their behaviors in OT setting. In the next section, we consider the process, method, and structure of the assessment of adaptive functions in OT.

Method and Structure of Psychiatric OT Assessment

Observational Assessment in OT Setting: ASPOT

We have developed a new scale for assessment of the elementary adaptive functions (the Assessment System for Psychiatric OT), and attempt to examine its validity (Atsumi & Ohbuchi, 2002a, b). This instrument is used for observational assessment, that is, OTRs rate patients' adaptive functions using this scale based on the observation of their behaviors in OT setting.

There are several possible methods, such as interview, task performance, or observation, for OT assessment of adaptive functions, and each has merits and demerits. Interview with patients or their families gives OTR an opportunity to get information of patients' real life outside hospitals, but the information is sometimes subjectively biased. Task performance provides an accurate measurement of a specific function, but it is difficult to assess a broad range of abilities and skills necessary for social life because of its narrow focus. We adopted the observational method for OT assessment for the following reasons: (1) OTR can repeatedly make the

assessment in routine OT with small cost (repeatableness and small cost); (2) The observational data from OT are available only for OTR (uniqueness); (3) By observing in different activities, OTR can assess different adaptive functions comprehensively (multi-phase and comprehensiveness). However, the observational method has a weakness, that is, reliability of rating is sometimes impaired by the rater bias. To reduce this bias, it is crucial to improve OTRs' skills of observation and rating using scales.

ASPOT consists of the OT Observation Scale (O Scale) and the Social Adaptive Function Scale (S Scale). The O Scale is that for observational assessment in OT settings, and we explain the S scale later. Both scales consist of the same set of subscales: that is, those to assess ADL, interpersonal skills, and individual factors. From a review of the literature on OT assessment and a content analysis of items included in the other OT assessment scales, we came to assume that the assessment of elementary adaptive functions consists of the subscales to measure these three areas of abilities and skills (Atsumi & Ohbuchi, 2002c).

ADL is the skills necessary for an individual to independently live in community, and they consist of two sub-areas. Basic ADL is the skills necessary to keep health and safety and advanced ADL is the skills that enable an individual to enjoy social life and to be engaging in productive activities. Interpersonal skills are those necessary for an individual to participate into social interactions, and they also consist of two sub-areas. Basic interpersonal skills are those to cope with inevitable interpersonal contacts in social life and advanced interpersonal skills are those to manage productive and pleasant social activities by developing interpersonal relationships or participating in social groups. Individual factors are the mental and physical conditions that affect the level of adaptive functions.

The Two-Phase Theory of OT Assessment

By theoretically analyzing the processes of OT assessment, we developed the two- phase theory of OT assessment (Atusmi & Ohbuchi, 2002c), based on which ASPOT was constructed (Atumi & Ohbuchi, 2002d). Its outline is presented in Figure 3. To predict psychiatric patients' social adaptation, as we discussed, OTRs assess patients' ADL, interpersonal skills, and individual factors. At the first phase, OTRs do it by observing patients' behaviors in OT settings. This is represented as "Observational assessment in OT settings" in Figure 3, and the scale used at this phase is the O Scale of ASPOT. The sub-area of adaptive functions to be assessed may differ depending on the kind of OT activity, that is, a kind of activity provides OTRs with a good opportunity to observe patients' behaviors involving a certain sub-area of function, but not the other sub-area. In order to get sufficient information of a patient's adaptive functions, for this reason, OTRs have to have multiple opportunities to observe behaviors of the patient in different activity situations. The multiple observations is represented in Figure 4. Activity X is suitable for observing Function A and B, but not Function C and D. For more comprehensive assessment, OTRs must observe the same patient in Activity Y. As the O Scale is filled in for each observation, OTRs have multiple results using the O Scale for each patient.

The most important purpose of OT assessment is not to evaluate patients' adaptive functions in OT setting, but to reliably infer how they can be functional in real society. At the second phase

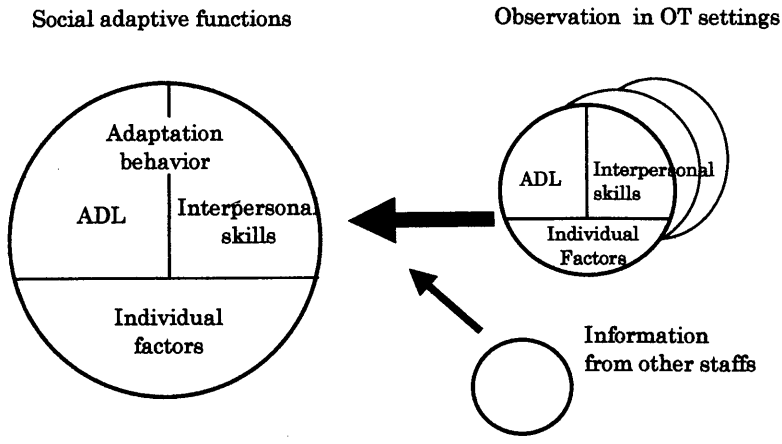

Figure 3 The two-phase theory of OT assessment.

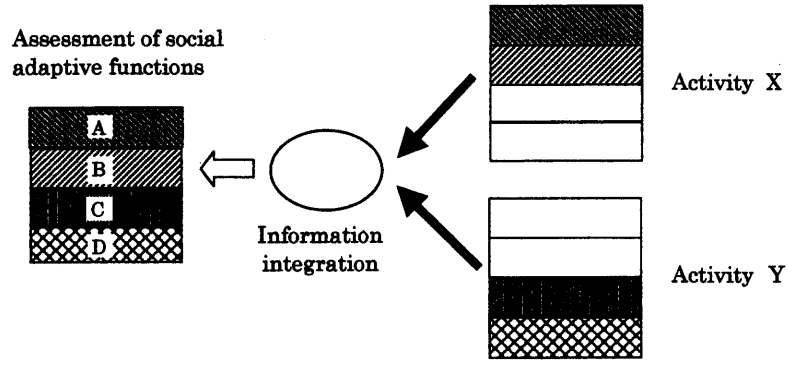

Figure 4 The theoretical structure of psychiatric OT assessment.

of OT assessment, therefore, OTRs attempt to evaluate the overall level of elementary adaptive functions of a patient. It is done by integrating multiple results obtained using the O Scale. In Figure 3, this phase is represented as "Assessment of social adaptive functions," in which the S scale of ASPOT is used. An arrow from "Observational assessment in OT settings" to "Assessment of social adaptive functions" means the integration of information regarding adaptive functions. It consists of two different types of integration. One type is the integration of multiple results obtained for a patient by observational assessment in OT setting, as we explained above. The other type of integration considers differences of the environments in which adaptive behaviors occur. In the assessment of social adaptive functions at the second phase, OTRs adopt a standard of social adaptation that an individual live in the standard environment without undue dependence on others. However, the observational assessment in OT settings (the first phase) is conducted in an environment in which patients can readily receive coaching medical professionals (OTRs). Further, the quality of support differs across activities. OTRs have to infer the level of a patient's adaptive functions in the non-supportive standard environment from the data

obtained in the supportive environment (OT setting). It means that the information integration at the second phase includes such a transformation or re-interpretation of the data considering the level and quality of support involved in each OT activity. In the cognitive work, OTRs can also use the information from the other professionals or patients' families.

In summary, the OT assessment of social adaptive functions includes these two types of information integration. Exploration of the cognitive processes involved in the OT assessment is crucial in the future research.

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